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method comprises administering, to a subject to which such treatment or prevention is needed or desirable, an effective amount of an agent that selectively inhibits bacterial DNA replication initiation, or a pharmaceutically acceptable salt thereof, thereby said disease or disorder is treated or prevented. Preferably, the disease or disorder is caused by or associated with *E. coli* or *H. pylori* infection. Also preferably, the disease or disorder caused by or associated with the bacterial, especially, *E. coli* or *H. pylori* infection, is treated or prevented by administering to the subject an effective amount of a compound, or a pharmaceutically acceptable salt thereof, having the following formula II:

$$H_2N$$
  $NH(CH_2)\pi$   $COOR$ 

wherein n is an integer from 0-1, and R is elected from the group consisting of hydrogen,  $C_{1-10}$  alkyl,  $C_{1-10}$  aryl and

$$\bigcirc$$
 COOCH<sub>2</sub>  $\bigcirc$  CH<sub>3</sub>

Preferably, the compound to be administered has the following formula III (NE-2001):

$$H_{2}N$$
  $-NH-CH_{2}$   $COO-CH_{2}$   $-COOCH_{2}$   $-CH_{3}$ 

In still another aspect, the present invention is directed to a combination, which combination comprises an agent that selectively inhibits bacterial DNA replication initiation in *E. coli* or *H. pylori*, or a pharmaceutically acceptable salt thereof, and an anti-*H. pylori* or anti-*E. coli* agent. Preferably, the combination comprises a compound, or a pharmaceutically acceptable salt thereof, having the following formula II:

$$H_2N$$
 NH(CH<sub>2</sub>) $\pi$  COOR

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wherein n is an integer from 0-1, and R is elected from the group consisting of hydrogen,  $C_{1-10}$  alkyl,  $C_{1-10}$  aryl and

$$\bigcirc$$
 COOCH<sub>2</sub>  $\bigcirc$  CH<sub>3</sub>

and an anti-*H. pylori* agent. More preferably, the compound to be included in the combination has the following formula III (NE-2001):

$$\begin{array}{c} \text{HN} \\ \text{NH-CH}_2 \\ \text{COOCH}_2 \\ \end{array} \begin{array}{c} \text{COOCH}_2 \\ \end{array} \begin{array}{c} \text{CH}_3 \\ \end{array}$$

Kits comprising the above combinations are also provided. Methods for treating or preventing a disease or disorder caused by or associated with bacterial infection, e.g., E. coli or H. pylori infection, using the above combinations and kits are further provided.

## Brief Description of the Drawings

Figure 1 illustrates effects of the compound PH04 on cell growth, DNA synthesis and proteinase In activity in synchronized *E. coli* Cells.

Figure 2 illustrates the anti-H. pylori effects of the compound NE-2001.

Figure 3 illustrates the anti-*H. pylori* effects of the compound NE-2001 at various pH values.

## Modes of Carrying Out the Invention

For clarity of disclosure, and not by way of limitation, the detailed description of the invention is divided into the subsections that follow.

## A. Definitions

Unless defined otherwise, all technical and scientific terms used herein have the same meaning as is commonly understood by one of ordinary skill in the art to which this invention belongs. All patents, applications, published applications and other

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publications and sequences from GenBank and other databases referred to herein are incorporated by reference in their entirety. If a definition set forth in this section is contrary to or otherwise inconsistent with a definition set forth in applications, published applications and other publications and sequences from GenBank and other data bases that are herein incorporated by reference, the definition set forth in this section prevails over the definition that is incorporated herein by reference.

As used herein, "a" or "an" means "at least one" or "one or more."

As used herein, a "Helicobacter" refers to a genus of helical, curved, or straight microaerophilic bacteria with rounded ends and multiple sheathed flagella (unipolar or bipolar and lateral) with terminal bulbs. It forms nonpigmented, translucent colonies, usually 1-2 mm in diameter. It is usually catalase and oxidase positive. It is found in gastric mucosa of primates, including human beings and ferrets. Some species are associated with gastric and peptic ulcers.

As used herein, a "Helicobacter pylori" refers to species of the genus of Helicobacter. It is an S-shaped or curved Gram negative bacteria, non-spore forming, and can be flagellate. It is found in human stomach and was originally named Campylobacter pyloridis. Infection with H. pylori produces urease and is associated with several gastroduodenal diseases including gastritis and gastric, duodenal, and peptic ulcers.

As used herein, "a disease or disorder caused by *H. pylori* infection" refers to a disease or disorder caused by *H. pylori* infection alone or in combination with other agents and/or conditions, whether inheritable and/or acquired.

As used herein, "an anti-H. pylori agent" does not encompass the compound of the present invention, i.e., a compound having the following formula II:

As used herein, a "Escherichia coli (E. coli)" refers to the archetypal bacterium for biochemists, used very extensively in experimental work. It is a rod-shaped Gram negative bacillus abundant in the large intestine (colon) of mammals. It is normally non-

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